#### POUCH CONTAINER WITH MOUTH MEMBER

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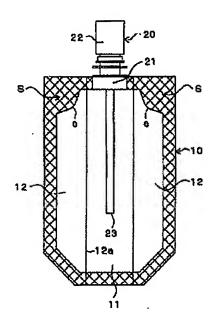
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Abstract of JP2000344252 PROBLEM TO BE SOLVED: To scarcely leave air in a bag-shaped container main body and prevent the leakage of a filled content therefrom. SOLUTION: A pouch container is constituted of a container main body 10 formed of a pair of exterior sheets 11 and a pair of gusset sheets 12 to be folded formed on both sides of the exterior sheets and a mouth member 20 set on the container main body 10, and the container main body 10 is formed into the bag shape by heat sealing the peripheral edges of the gusset sheets 12 on the peripheral edges of the exterior sheets 11 and also heat sealing the upper and lower edges of the exterior sheets 11 each other. Heat sealing areas S of the gusset sheets 12 and the upper end corners of the exterior sheets 11 are protruded inwardly to gradually narrow an inner space of the container main body 10 facing upward, and the inner edges (e) of the heat sealing areas are so set as to form a curved line protruded inside a line extending by 45 deg, angle from the upper ends of folding-in edges 12a of the gusset sheets 12 toward the side edges of the gusset sheets 12.



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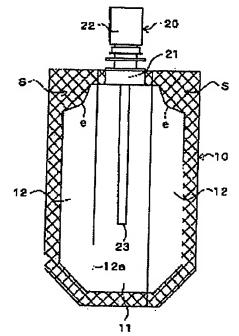
UNO ETSUTAKA OMORI SHOICHI

# (54) POUCH CONTAINER WITH MOUTH MEMBER

(57)Abstract:

PROBLEM TO BE SOLVED: To scarcely leave air in a bag-shaped container main body and prevent the leakage of a filled content therefrom.

SOLUTION: A pouch container is constituted of a container main body 10 formed of a pair of exterior sheets 11 and a pair of gusset sheets 12 to be folded formed on both sides of the exterior sheets and a mouth member 20 set on the container main body 10, and the container main body 10 is formed into the bag shape by heat sealing the peripheral edges of the gusset sheets 12 on the peripheral edges of the exterior sheets 11 and also heat sealing the upper and lower edges of the exterior sheets 11 each other. Heat sealing areas S of the gusset sheets 12 and the



upper end corners of the exterior sheets 11 are protruded inwardly to gradually narrow an inner space of the container main body 10 facing upward, and the inner edges (e) of the heat sealing areas are so set as to form a curved line protruded inside a line extending by 45° angle from the upper ends of folding-in edges 12a of the gusset sheets 12 toward the side edges of the gusset sheets 12.

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## DETAILED DESCRIPTION

[Detailed Description of the Invention]

[0001]

[Field of the Invention] This invention relates to the pouch container with a mouth member filled up with fluids and viscous bodies, such as liquid beverages and foodstuffs, such as a soft drink, drugs, and a detergent.

[0002]

[Description of the Prior Art]As a container filled up with liquid beverages, such as a soft drink, in recent years, With the flexible sheet of a heat adhesive property, the inner surface which laminated aluminum foil etc. in the synthetic resin film forms the saccate package body which has a gusset part, and the pouch container with a mouth member which attached the mouth member which can be opened and closed, and which serves as a pouring mouth and a taste at this package body is used increasingly.

[0003]By the way, this kind of pouch container with a mouth member, The mouth member 50 by which the stopper 52 and the tubed or cylindrical derivation part 53 were attached to the upper part and the lower part of the adherence part 51 as shown in <u>drawing 4</u> (a), (b), and <u>drawing 5</u> (a) and (b), It has the gusset sheet 62 of the right-and-left couple which is inserted inside from the side part of the armor sheet 61 of a rear surface couple, and both the armor sheets 61, and forms a gusset part, The edge part of said gusset sheet 62 is heat sealed by said armor sheet 61, and the field shown in (<u>drawing 4</u> (a) with a slash by the rising wood and the margo-inferior part of said armor sheet 61 being heat sealed mutually is a heat-sealing field.), It comprises the package body 60 formed in saccate.

The adherence part 51 and the derivation part 53 of said mouth member 50 in the state where it was inserted between said armor sheets 61. Said adherence part 51 is heat sealed by the rising wood of said armor sheet 61 (for example, indicated to JP,2-21399,Y, the patent No. 2745388 gazette, and JP,10-72044,A.).

[0004]

[Problem(s) to be Solved by the Invention]By the way, after restoration of the contents to a

pouch container with a mouth member which was mentioned above deaerates the inside of the saccate package body 60, it is performed, but. When it is difficult to deaerate the package body 60 thoroughly and is filled up with contents, There was a possibility of the air which exists in the circumference and the inside of the tubed or cylindrical derivation part 53 having remained easily to upper bed corner part A (refer to drawing 4 (a)) of the armor sheet 61 and the gusset sheet 62 which is a shoulder part of the package body 60 in which it is hard to fill up with contents, and becoming causes, such as deterioration of the contents with which it filled up.

[0005]As mentioned above, in order that the rising wood of the package body 60 may weld the mouth member 50, Since it heat seals with an elevated temperature and high voltage, especially the boundary point B with the heat - sealed portion in the insertion edge of the gusset sheet 62 (refer to drawing 4 (a) and drawing 5 (a) and (b)) will tend to receive a damage, and the film strength of the portion will fall compared with other portions. Therefore, if a pressure and a shock are added to the lower part of the package body 60 in which it filled up with contents from the exterior, The gusset sheet 62 could extend up with the internal pressure, the pinhole was easy to be formed at the boundary point B with the heat - sealed portion in the insertion edge of the gusset sheet 62 to which film strength fell, and there was a possibility that the contents with which it filled up from the pinhole might begin to leak.

[0006]Then, air cannot remain easily in a saccate package body, and there is a technical problem of this invention in providing the pouch container with a mouth member which can prevent the leakage of the contents with which it filled up.

[The means for solving a technical problem and its effect] The mouth member by which the pouring mouth and the taste were formed in the upper part of an adherence part as for this invention in order to solve the above-mentioned technical problem, It has a gusset sheet of the right-and-left couple which is inserted inside from the side part of the armor sheet of a rear surface couple, and both armor sheets, and forms a gusset part, It has the package body formed in saccate by the edge part of said gusset sheet being heat sealed by said armor sheet, and the rising wood and the margo-inferior part of said armor sheet being heat sealed mutually, The adherence part of said mouth member in the state where it was inserted between the rising wood of said armor sheet. It was made to make the heat-sealing field of the upper bed corner part of said gusset sheet and said armor sheet project over an inner direction in the pouch container with a mouth member heat sealed by said armor sheet, so that the building envelope of said saccate package body may become narrow gradually toward the upper part.

[0008]In the pouch container with a mouth member constituted as mentioned above. Since the field where it is hard to fill up with the contents in the upper bed corner part of an armor sheet and a gusset sheet which is a shoulder part of a package body is heat sealed beforehand, Since the heat-sealing field is set up so that air may not remain into the portion

and the building envelope of a package body may moreover become narrow gradually toward the upper part, the air which remains in a package body becomes is easy to be discharged at the time of restoration of contents outside. Therefore, in the state where it filled up with contents, air hardly remains in a package body and deterioration of the contents with which it filled up etc. can be prevented certainly.

[0009]Since a certain amount of field in an upper bed corner part of an armor sheet and a gusset sheet which is a shoulder part of a package body is heat sealed beforehand, Even if a pressure and a shock are added to the lower part of a package body in which it filled up with contents from the exterior, it can be hard to extend a gusset sheet up with the internal pressure, and a pinhole becomes is hard to be formed at a boundary point with a heat sealed portion in an insertion edge of a gusset sheet to which film strength fell.

[0010]Like the pouch container with a mouth member according to claim 2 especially, Said gusset sheet. A common-law marriage of a heat-sealing field of an upper hed corner part of

gusset sheet. A common-law marriage of a heat-sealing field of an upper bed corner part of said armor sheet. If it is in some which are set up become the curve which swelled so that it might project inside a line prolonged at an angle of 45 degrees in the lower part side toward a side edge of each gusset sheet from a boundary point with a heat - sealed portion by the side of an upper limb in an insertion edge of each gusset sheet, Power of acting with internal pressure etc. is distributed, and since a gusset sheet becomes being able to be further hard to extend up, a pinhole becomes is further hard to be formed at a boundary point with a heat - sealed portion in an insertion edge of a gusset sheet to which film strength fell.

#### [0011]

[Embodiment of the Invention]Hereafter, an embodiment is described with reference to drawings. As shown in <u>drawing 1</u> and <u>drawing 2</u>, this pouch container 1 with a mouth member, The package body 10 formed in the outside surface of the synthetic resin film which has heat adhesive properties, such as polyethylene and polypropylene, saccate with the flexible sheet which laminated the polyester film etc. which laminated gas barrier property sheets, such as aluminum foil, etc., It comprises the mouth member 20 formed with the heat adhesive resin attached to this package body 10.

[0012]As said package body 10 comprises the gusset sheet 12 of the right-and-left couple which is inserted inside from the side part of the armor sheet 11 of a rear surface couple, and both the armor sheets 11, and forms a gusset part on either side and an intersection slash shows to <u>drawing 2</u>. The periphery of the inner surface of the inserted-in gusset sheet 12 is heat sealed by the inner surface of the armor sheet 11, and it is formed in saccate by the rising wood and the margo-inferior part of an inner surface of the armor sheet 11 being heat sealed mutually.

[0013]About the upper bed corner part of the gusset sheet 12 and the armor sheet 11 in the package body 10. As shown in <u>drawing 2</u>, so that the building envelope of said saccate package body 10 may become narrow gradually toward the upper part, The heat-sealing field S has jutted out into the inner direction, and the overhanging heat-sealing field S. As

shown in <u>drawing 3</u> (a), It is set up become the curve which swelled so that the commonlaw marriage e might project inside the line L prolonged at the angle of 45 degrees in the lower part side toward the side edge of each gusset sheet 12 from the boundary point X with the heat - sealed portion by the side of the upper limb in the insertion edge 12a of each gusset sheet 12.

[0014]The adherence part 21 which said mouth member 20 is formed with polyethylene, polypropylene, etc., and is attached to said saccate package body 10. The stopper 22 which has the screw cap used as a pouring mouth or a taste which can be opened and closed, and which was formed in the upper part of this adherence part 21, it comprises the tubed derivation part 23 which makes easy the extrusion of the contents with which it filled up in the package body 10 provided in the lower part of said adherence part 21, and where said derivation part 23 is inserted into the package body 10, the side of the adherence part 21 is heat sealed by the package body 10.

[0015]The pouch container 1 with a mouth member constituted as mentioned above, Since the field where it does not fill up with the contents in the upper bed corner part of the armor sheet 11 and the gusset sheet 12 which is a shoulder part of the package body 10 is heat sealed beforehand, Since the heat-sealing field S is set up so that air may not remain into the portion and the building envelope of the package body 10 may moreover become narrow gradually toward the upper part, The air which remains in the package body 10 at the time of restoration of contents becomes discharged [ tend ] outside along with the common-law marriage of the heat-sealing field S. Therefore, where this pouch container 1 with a mouth member is filled up with contents, air hardly remains in the package body 10, and deterioration of the contents with which it filled up etc. can be prevented certainly. [0016]. The gusset sheet 12. The common-law marriage e of the heat-sealing field S of the upper bed corner part of the armor sheet 11. Since it is set up become the curve which swelled so that it might project inside the line L prolonged at the angle of 45 degrees in the lower part side toward the side edge of each gusset sheet 12 from the boundary point X with the heat - sealed portion by the side of the upper limb in the insertion edge 12a of each gusset sheet 12, Since the gusset sheet 12 becomes the power of acting with internal pressure etc. being distributed and being able to be hard to extend up even if a pressure and a shock are added to the lower part of the package body 10 from the exterior in the state where it filled up with contents, A pinhole is formed at the boundary point X with the heat - sealed portion in the insertion edge 12a of the gusset sheet 12 to which film strength fell in connection with welding the adherence part 21 of the mouth member 20 to the armor sheet 11, it is hard, and the leakage of the contents with which it filled up can be prevented.

[0017]The common-law marriage e of the heat-sealing field S like the embodiment mentioned above, Although it is desirable to have the shape of a curve which swelled so that it might project in an inner direction, as long as it has swollen so that it may project in an inner direction from the line L prolonged at the angle of 45 degrees in the lower part side

toward the side edge of the gusset sheet 12 from the boundary point X, as shown in drawing 3 (b), it may be the crooked linear shape thing.

[0018]In the embodiment mentioned above, although the tubed derivation part 23 is formed in the lower part of the adherence part 21, an opening and a break may be formed [ whose sectional shape is ] in the peripheral surface of a tube-like object like the rod-like structure of "H", "X", "N", and the shape of a "U" character not necessarily cylindrical.

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#### TECHNICAL PROBLEM

[Problem(s) to be Solved by the Invention]By the way, after restoration of the contents to a pouch container with a mouth member which was mentioned above deaerates the inside of the saccate package body 60, it is performed, but. When it is difficult to deaerate the package body 60 thoroughly and is filled up with contents, There was a possibility of the air which exists in the circumference and the inside of the tubed or cylindrical derivation part 53 having remained easily to upper bed corner part A (refer to drawing 4 (a)) of the armor sheet 61 and the gusset sheet 62 which is a shoulder part of the package body 60 in which it is hard to fill up with contents, and becoming causes, such as deterioration of the contents with which it filled up.